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# NTE7037
# Integrated Circuit
# Module, 2 Output Positive Voltage Regulator for VCR

**Features:**
- 2 Outputs
- Output Voltage Select Function

**Absolute Maximum Ratings:** ($T_A$ = +25°C unless otherwise specified)

Maximum DC Input Voltage, $V_{IN}$ (DC) Max . . . . . 30V
Maximum Average Output Current, $I_O$ Max
$V_O1$ . . . . . 1.0A
$V_O2$ . . . . . 1.0A
Maximum Peak Output Current (Note 1), $I_O$ Max
$V_O1$ . . . . . 2.0A
$V_O2$ . . . . . 2.0A
Operating Case Temperature, $T_C$ Max . . . . . +105°C
Maximum Junction Temperature, $T_J$ Max . . . . . +150°C
Storage Temperature Range, $T_{stg}$ . . . . . –30° to +105°C
Thermal Resistance, Junction–to–Case, $R_{thJC}$ . . . . . 7°C/W

Note 1. Peak Current: For 0.2sec Max.

**Electrical Characteristics:** ($T_A$ = +25°C unless otherwise specified)

| Parameter | Test Conditions | $V_O1$ | $V_O2$ | Unit |
|---|---|---|---|---|
| Output Voltage Setting | Condition 1, Note 2 | 9.5±0.1 | 5.5±0.1 | V |
| Output Cutoff Residual Voltage | Condition 1, Note 3 | 0.1 | 0.1 | V Max |
| Ripple Voltage | Condition 1 | 5 | 5 | $mV_{p-p}$ Max |
| Temperature Coefficient | Condition 1 | 0.02 | 0.035 | %/°C Max |
| Input Regulation | Condition 2 | 10 | 10 | mV/V Max |
| | Condition 3 | 2 | 2 | |
| Load Regulation | Condition 4 | 50 | 50 | mV/A Max |
| Minimum Input–Output Voltage Difference | Condition 5 | 1.2 | 1.2 | V Max |

Note 2. Measurement must be made within 1 to 2 sec. after input switch is ON.

Note 3. When Pin7 is at High level (3V to 15V), $V_O1$, $V_O2$ are turned ON.
When Pin7 is at Low level (0.6V or less), $V_O1$, $V_O2$ are turned OFF.

**Test Conditions:**

Condition 1: $V_B$ = 45V, $V_{IN}$ (DC) 1 = 13V, $V_{IN}$ (DC) 2 = 9V, Ripple = 1.5m$V_{p-p}$
$I_O1$ = 0.5A, $I_O2$ = 0.5A

Condition 2: $V_B$ = 45V ±5V $V_{IN}$ (DC) 1 = 13V, $V_{IN}$ (DC) 2 = 9V,
$I_O1$ = 0.5A, $I_O2$ = 0.5A

Condition 3: $V_B$ = 45V, $V_{IN}$ (DC) 1 = 10.9V to 16V, $V_{IN}$ (DC) 2 = 16.9V to 12V,
$I_O1$ = 0.5A, $I_O2$ = 0.5A

Condition 4: $V_B$ = 45V, $V_{IN}$ (DC) 1 = 13V, $V_{IN}$ (DC) 2 = 9V, $I_O1$ = 0.1A to 1A,
$I_O2$ = 0.1A to 1A

Condition 5: $V_B$ = 45V, $I_O1$ = 1A, $I_O2$ = 1A

**Pin Connection Diagram**
(Front View)